

WHAT IS CLAIMED AS THE INVENTION IS:

1. A circular saw blade comprising:
- a generally circular blade portion; and
- 5 a plurality of spaced apart teeth attached to the circular blade portion, each tooth extending outwardly and upwardly from the circular blade portion, having a leading edge and a dimple formed therein proximate to the leading edge and having a positive rake.
- 10 2. A circular saw blade as claimed in claim 1 wherein each tooth has a leading plane and the dimple has a leading edge plane and a top cutting angle is defined by the tooth leading plane and the dimple leading edge plane and wherein positive rake is provided by the top cutting angle formed by the dimple.
- 15 3. A circular saw blade as claimed in claim 2 wherein the leading plane is inclined forwardly and wherein the positive rake is further provided by the forward inclination of the tooth.
4. A circular saw blade as claimed in claim 3 wherein the positive rake is in a range
- 20 between about 20 and about 45 degrees.

5. A circular saw blade as claimed in claim 4 wherein the positive rake is about 40 degrees.

6. A circular saw blade as claimed in claim 2 wherein each tooth defines a cutting

5 radius and a tooth top and a relief angle is defined by the cutting radius and the tooth top and the relief angle is between about 5 and about 15 degrees.

7. A circular saw blade as claimed in claim 6 wherein the relief angle is about 12 degrees.

10 8. A circular saw blade as claimed in claim 6 wherein each tooth has a lateral side and the blade portion has a plane and a lateral clearance angle is defined by the tooth lateral side and a plane from the leading edge parallel to the plane of the blade portion and the lateral clearance angle is between about 1.5 and about 5 degrees.

15 9. A circular saw blade as claimed in claim 8 wherein the lateral clearance angle is about 2.5 degrees.

20 10. A circular saw blade as claimed in claim 1 wherein the positive rake is in a range between about 20 and about 45 degrees.

11. A circular saw blade as claimed in claim 10 wherein the positive rake is about 40 degrees.

12. A circular saw blade as claimed in claim 1 wherein each tooth defines a cutting
5 radius and a tooth top and a relief angle is defined by the cutting radius and the tooth top and the relief angle is between about 5 and about 15 degrees.

13. A circular saw blade as claimed in claim 1 wherein each tooth has a lateral side
and the blade portion has a plane and a lateral clearance angle is defined by the tooth
10 lateral side and a plane from the leading edge parallel to the plane of the blade portion and the lateral clearance angle is between about 1.5 and about 5 degrees.

14. A circular saw blade as claimed in claim 1 wherein the dimple is generally
hemispherical shaped.

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15. A circular saw blade as claimed in claim 1 wherein the dimple is generally conical
shaped.

16. A circular saw blade as claimed in claim 1 wherein the dimple is generally
20 hemispherical shaped with truncated sides.

